IN THE CLAIMS

Please amend Claims 1, 3, 11 and 35 as indicated.

Please cancel Claim 10 as indicated, without prejudice and without disclaimer of subject matter.

1. (Currently Amended) A method of inflating and deflating a catheter having an expandable membrane, the method comprising the steps of:

determining a target pressure for inflation of the expandable membrane;

positioning the expandable membrane within a portion of a cardiovascular system;

controllably inflating the expandable membrane to at least ~~a~~ the predetermined target pressure;

ablating a desired tissue region, wherein the pressure in the expandable membrane during ablation exceeds the target pressure, and is lower than approximately 20 psi; and

controllably deflating the expandable membrane.

2. (Previously Presented) The method of claim 1, further comprising keeping the expandable membrane inflated until a region proximate the expandable membrane reaches a predetermined temperature range.

3. (Currently Amended) The method of claim 1, wherein the steps of controllably inflating the expandable membrane to ~~a~~ the target pressure is performed by inflation/deflation control means located within a first console.

4. (Original) The method of claim 3, wherein the inflation/deflation control means is a Proportional Integral Derivative controller.

5. (Original) The method of claim 4, wherein the inflation/deflation control means further includes a pressure switch that controls an on/off valve.

6. (Previously Presented) The method of claim 1, wherein, if the target pressure is not reached, further comprising the step of re-inflating the expandable membrane in order to reach the target pressure.

7. (Cancelled)

8. (Cancelled)

9. (Original) The method of claim 1, wherein the step of ablating the desired tissue region is part of a cryoablation process.

10. Cancelled

11. (Currently Amended) A method for inflating and deflating a catheter having an expandable membrane, the catheter being part of a catheter system including a first console, a catheter, and an umbilical system coupling the first console to the catheter, the method comprising the steps of:

evacuating air from the expandable membrane by creating a vacuum in the expandable membrane;

positioning the expandable membrane within a portion of a cardiovascular system;

controllably inflating the expandable membrane proximate a desired tissue region, the expandable membrane being inflated to a ~~predetermined~~ preselected target pressure level in order to provide sufficient mechanical force against the desired tissue region;

ablating the desired tissue region, wherein the pressure in the expandable membrane during ablation exceeds the target pressure, and is lower than approximately 20 psi; and

controllably deflating the expandable membrane.

CLAIMS 12-31: CANCELLED

32. (Previously Presented) The method of claim 1, wherein the step of controllably deflating the expandable membrane includes preventing deflation until a temperature in the balloon is higher than a predetermined temperature.

33. (Previously Presented) The method of claim 1, wherein the step of controllably deflating the expandable membrane includes reducing adhesion between the expandable membrane and the desired tissue region.

34. (Previously Presented) The method of claim 33, wherein reducing adhesion includes preventing deflation until a temperature in the balloon is higher than a predetermined temperature.

35. (Currently Amended) The method of claim 3, wherein the inflation/deflation control means is a proportional valve for controlling the delivery of fluid in order to reach and maintain ~~a predetermined~~ the preselected pressure in the balloon.

36. (Previously Presented) The method of claim 3, wherein the inflation/deflation control means is a fixed volume reservoir coupled to a shutoff valve located within the first console.